

REMARKS

The present Amendment is in response to the Office Action made final dated August 5, 2005 in reference to the above-identified application. Filed concurrently herewith is a second request for continued examination (RCE) and a request for a two-month extension of time, making this response due by January 5, 2005. Claims 13, 15-19 and 25-28 are pending.

The Examiner maintains that claims 13, 15-19 and 25-27 are unclear and requires clarification, asserting that the terms have to be consistent throughout all of the independent claims as well as dependent claims to avoid confusions.

As for the rejections over the art, claims 13 and 15-19 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,522,351 to Park in view of U.S. Patent No. 5,416,510 to Lipton et al. Claims 25-28 are rejected under 35 U.S.C. §103(a) over Lipton et al. alone.

At the outset, Applicant respectfully disagrees (1) that the claims lack clarity; and (2) with the Examiner's blanket statement in § 4 that "[t]he terms have to be consistent through out all the independent claims as well as dependent claims to avoid confusions." On the one hand, the Examiner has not indicated the legal grounds (statutory or otherwise) upon which either the objection or the statement are based. Further, previously submitted claims containing similar recitations were not objected to by the Examiner as lacking clarity. Notwithstanding this it is submitted that the claims are clear. For example, in claim 1 it should be recognized the first and second projectors project the odd and even pictures which are represented by picture signals.

Applicant also respectfully disagrees that any of the examined claims of the present application are obvious under 35 U.S.C. §103(a). Included with the present response as Exhibit A is a second declaration of Anne Solveg Tonnesen (the "2nd Tonnesen Decl.") which comments on various statements made by the Examiner in support of her claim rejections. Where appropriate, the 2nd Tonnesen Decl. is referenced in this response by paragraph number. The Examiner will also note that Ms. Tonnesen's qualifications were previously set forth in ¶¶ 1&2 of her first declaration (as well as attachment 1 thereto) which were included in response to the previous office action.

From a careful reading of the Examiner's §103(a) rejection in § 6 of the Office Action, it is believed that the Examiner maintains that Park explicitly teaches every feature recited in claims 13 and 15-19 with the exception of the following:

(1) Park implicitly teaches the performance of "some sort of 'decoding' function" because there is a conversion of the L and R eye television image signals to L and R eye image signals by the L and R receiving sections. **[Presumably this position by the Examiner pertains to independent claim 13 which provides for picture signals for odd and even numbered pictures being "decoded" and stored in first and second picture storages, respectively.]**

(2) Park implicitly teaches L and R eye picture storages because the reference teaches L and R eye image signals being repeatedly or periodically scanned by double scanning sections. **[This position presumably pertains to a rejection of independent claim 13 which provides for a first picture storage and a second picture storage, as well as independent claim 19 which provides for a left picture storage and a right picture storage.]**

(3) It would be an obvious extension of the Park reference to make Park's cameras take L and R eye pictures in a time sequential manner so that the number of incoming pictures needed for achieving projection can be reduced. Moreover, according to the Examiner, the cyclical form of the incoming signal "does not differentiate the method of projection of the left and right eye pictures to produce the stereoscopic image of the object." **[The**

Examiner's position in this regard presumably pertains to independent claims 13 and 19 which discuss an incoming picture signal which alternates cyclically between L and R eye pictures.]

(4) It would be obvious to modify Park to incorporate two projectors since prior art Fig. 1 of Park teaches this is known, and further since Lipton teaches the use of L and R projectors for the benefit of allowing simultaneous projection of pictures without time delay. **[Presumably, the Examiner's statements in this regard pertain to independent claim 13 which recites a first projector and a second projector, as well as independent claim 19 which recites a left eye projector and a right projector. The Examiner's statement that it would be beneficial based on Lipton's teaching of L and R projectors to allow for "simultaneous" projections of pictures presumably pertains to dependent claim 15 which recites that "the first and second projectors project associated right and left picture signals at the same time."]**

With regard to the rejection of claims 25-28 over Lipton, as set forth in § 7 of the Office Action, it is presumed that the Examiner maintains that Lipton explicitly recites every feature from these claims with the exception of the following:

(1) Lipton implicitly teaches a "certain page selector" included with the display controller for selecting L and R eye picture signals from the recorder since the display controller selects L and R eye picture signals and directs them, respectively via first and second optical paths, to L and R projectors. **[Presumably, this position pertains to independent claim 25 which provides for a page selector. Applicant notes also that dependent claim 28 calls for first and second decoders which are respectively coupled between the page selector and the first and second projectors.]**

(2) Lipton either implicitly teaches a control unit associated with the page selector for sensing the incoming L and R picture signals, or it would be an obvious modification to incorporate such a control unit into Lipton to ensure proper selection and transmission of the picture signals to their respective projectors. **[The Examiner's position in this regard also presumably relates to independent claim 25 which recites that the page selector is "assigned a control unit...".]**

(3) The Examiner acknowledges that there is no explicit teaching in Lipton of L and R eye picture signals being cyclically

presented, with odd numbered image signals and even numbered image signals being transmitted to first and second projectors, respectively. The Examiner also does not appear to even maintain that this feature is implicit. Instead, the Examiner focuses on the explicit teaching in Lipton that L and R eye picture signals are transmitted, respectively, to L and R projectors and continues on to state "whether to have them coming in alternative or cyclic format or not does not differentiate the projection." **[The Examiner's position in this regard presumably pertains to independent claims 13 and 19 which discuss an incoming picture signal which alternates cyclically between L and R eye pictures.]**

(4) It is either implicit from Lipton, or an obvious modification to Lipton, to incorporate certain decoders in Lipton's display controller so that the multiplexed L and R eye picture signals can be demultiplexed, selected and properly formatted so that picture signals are transmitted and properly displayed on the projectors. **[As stated by the Examiner in the Office Action, this position pertains to dependent claim 28.]**

Applicant would like to initially address various comments by the Examiner in support of her positions. The first pertains to the Examiner's position (3) above pertaining to Park and position (3) above pertaining to Lipton. These statements are to the effect that the cyclical form of the incoming picture signals does not differentiate the projection. More particularly, in § 6 of the Office Action the Examiner states "[h]owever Park does teach explicitly that the left eye picture and the right eye pictures are *separated* stored, decoded and scanned, whether to make them coming in cyclical form or not does not differentiate the method of projection of the left and right eye pictures to produce the stereoscopic image of the object." In § 7 the Examiner makes the following similar statement: "[h]owever Lipton does teach explicitly that the left eye picture signals and the right eye picture signals are transmitted to left and right to projectors respectively whether to have them coming in alternative or cyclic format or not does not differentiate the projection."

By these statements, it appears the Examiner affords little or no patentable weight to the recitation in independent claim 13 of “an incoming picture signal alternating cyclically between a picture intended for the right eye and a picture intended for the left eye, ...”; or the recitation in sub-paragraph (a) of independent claim 19 which recites “receiving an incoming picture signal which alternates cyclically between a right eye picture and a left eye picture, ...”; or the recitation in device claim 25 that the pictures are “represented by an incoming picture signal which alternates cyclically between a picture intended for the right eye and a picture intended for the left eye, ...”.¹ While the above recitations are recited in the preambles of independent claims 13 and 25, and establish an environment for them, there can be no question that independent method claim 19 contains a positive recitation concerning the reception of such an incoming picture signal.

For the Examiner to readily dismiss such recitations (as if they are not present in the claims) is simply improper. Further, the Examiner has provided no authority to support her position in this regard and, thus, has failed to make a *prima facie* case of obviousness for this reason alone.

Applicant would also like to address the Examiner’s alternative reasoning set forth in positions (2) and (4) above with regard to Lipton. The Examiner has asserted that Lipton either implicitly teaches a control unit associated with a page selector and decoders for the display controller, or such features would be obvious modifications to Lipton. As for whether a

¹ The Examiner will also please note, for example, with respect to independent claim 25 that the claimed control unit is “adapted to *sense* the incoming picture signal and *recognize* signal values or signal codes indicating new pictures and to alternately transmit the new pictures to said page selector.” (emphasis added).

page selector with an associated control unit is implicitly taught by Lipton, this is addressed and the in the 2nd Tonnesen Decl. at ¶¶ 32-34 where Ms. Tonnesen points out her disagreement with the Examiner's interpretations. As for whether such teachings are in the alternative obvious modifications to Lipton, the Examiner has not pointed out any additional prior art which teaches such features. Thus, it is respectfully submitted that since the Examiner has failed to provide the requisite basis upon which such a modification would be made, she has not established a *prima facie* case of obviousness under this alternative ground.

With particular reference now to the Examiner's rejection of claims 13 and 15-19 over Park in view of Lipton et al., as set forth in § 6 of the Office Action, Applicant respectfully disagrees that Park teaches periodic scanning as set forth in the pending claims. Independent claim 13 recites that the first picture storage "is scanned periodically and projected by said first projector," and that the second picture storage is "scanned periodically and projected by said second projector." Independent claim 19 recites a "left picture storage which is scanned periodically to transmit each respective left eye picture to be projected only by said at least one left eye projector" and a "right picture storage which is scanned periodically to transmit each respective right eye picture to be projected only by said at least one right eye projector."

As explained by Ms. Tonnesen, the repeated scanning in Park scans each horizontal line twice creating an intermediate picture that is not suitable for projection; instead, this repeated scanning is followed by an alternating selection of a horizontal line from the intermediate left and right scanned

image signals to create a multiplexed image (2nd Tonnesen Decl., ¶¶ 12-14, 18 & 19).

It is therefore submitted that, while Park in a general sense teaches periodic scanning, the reference does not teach that the pictures which are stored in the first and second picture storages are scanned and projected by the first and second projectors, respectively (claim 13). Rather, there is a transformation which takes place in Park (See Fig. 5). That is, picture displayed at 420 differs from those stored at 402 and 404 because it is a multiplexed version of them.

As for the Examiner's position that Park performs "some sort of 'decoding' function", it does not do so with respect to the incoming picture signal in order to separate out the odd and even numbered pictures. Thus, even assuming Park performs some decoding, it doesn't do so in the manner recited in independent claim 13 because it is not necessary.

In ¶¶ 20-27 of her declaration, Ms. Tonnesen specifically addresses the Examiner's point that the artisan can make the cameras in Park take left and right eye pictures of the object in a time sequential manner ... for the benefit of reducing the number of incoming pictures needed for achieving the projection. Ms. Tonnesen provides two examples of how Park's cameras might be used in a time sequential manner but concludes that doing so would achieve undesirable results. It is, therefore, respectfully submitted that the Examiner's motivation for modifying Park in such a manner is not reasonably based since complications would arise even if one were able to reduce the number of incoming pictures, as suggested.

In ¶ 28 of her declaration, Mr. Tonnesen points out her disagreement with the Examiner's position that Park teaches alternate transmission of the L and R images to the projection device. More particularly, Ms. Tonnesen points out that the multiplexing of the L and R images and interlaced displaying on the projector is simply not the same as alternately transmitting images. Therefore, to the extent the Examiner relies on this characterization of Park to support her position that multiple projectors could be used, it is submitted that this position relies on a false premise.

Ms. Tonnesen also points out at ¶ 30 her disagreement with the Examiner's statement relating to claim 17 that the L and R double scanning sections in Park serve as first and second picture generators. Ms. Tonnesen explains that they are not equivalent due to their differing functions.

Turning now to § 7 of the Office Action, in which the Examiner rejects claims 25-28 under 35 U.S.C. §103(a) as being unpatentable over Lipton, this is also addressed by the 2nd Tonnesen Decl. beginning at ¶¶ 32-34. Ms. Tonnesen particularly addresses the Examiner's position that, by implication, Lipton et al. has a page selector for selecting the left and right eye picture signals from the recorder. In short, Ms. Tonnesen points out that Lipton's embodiments teach the topological operation on the two signals to produce a multiplexed signal which, when displayed as a multiplexed image, shows the left eye and right eye pictures stored as adjacent images in a side-by-side format within one picture frame. As such, this is distinguishable from a page selection process since Lipton et al. teaches decoupling and demultiplexing.

It is respectfully submitted, then, that independent claim 25's feature of a page selector assigned to a control unit is not fully and fairly taught by the

Lipton reference. Moreover, since Lipton's multiplexing of the images avoids the need for a page selector, it follows that there is no control unit assigned to a page selector in Lipton, as also set forth in independent claim 25 of the present application. See 2nd Tonnesen Decl., ¶ 34.

No additional claims fees are believed to be payable upon the Amendment. However, the Commissioner is hereby authorized to charge any deficiency in the required fees, or to credit any overpayment, to deposit account number 13-1940.

Based on the foregoing, Applicant respectfully submits that the present application is in complete condition for allowance and action to that end is courteously solicited. If any issues remain to be resolved prior to the granting of this application, the Examiner is requested to contact the undersigned attorney for the Applicant at the telephone number listed below.

Respectfully submitted,

MARTIN & HENSON, P.C.



Timothy J. Martin, #28,640
Michael R. Henson, #39,222
John W. Carpenter, #57,830
9250 West 5th Avenue, Suite 200
Lakewood, Colorado 80226
(303) 232-3388

CERTIFICATE OF MAILING UNDER 37 C.F.R. 1.8

I hereby certify that the foregoing **TRANSMITTAL OF RCE FORM PTO/SB/30 (1 page), CHECK NO. 5360 IN THE AMOUNT OF \$395.00, AMENDMENT (20 pages), DECLARATION OF MS. TONNESEN (17 pages), REQUEST FOR TWO-MONTH EXTENSION OF TIME (2 pages) AND CHECK NO. IN THE AMOUNT OF \$225.00** is being deposited with the United States Postal Service as first-class mail in an envelope addressed to Mail Stop RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 10th day of December, 2005.


Christy L. Burbank